

ABSTRACT OF THE DISCLOSURE

An assay method and kit for detecting a chemical. The method and kit utilize a metal surface capable of surface enhanced Raman Scattering. The metal surface may be provided in the form of one or more nanoparticles, to increase the surface enhanced Raman Scattering capability of the metal surface. The nanoparticles may be treated with one or more additives to further enhance or maintain the surface enhanced Raman Scattering capability of the nanoparticles.